

North Korea to fight food insecurity and natural disaster with trees

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Forest ranger and villagers in a tree nursery in DPR Korea are shown. Credit: ICRAF-China

Experts in DPR Korea intend to restore the quality of forest lands, alleviate wide-spread food insecurity and reduce the frequency of natural disasters in the country through an ambitious programme of agroforestry "the use of trees on farms and in the landscape". The DPR Korea is only the second country in Asia to launch such an initiative.

The National Agroforestry Strategy and Action Plan 2015-2024 was drafted by The Ministry of Land and Environment Protection (MoLEP), in collaboration with the Swiss Agency for Development and Cooperation (SDC) and with scientific input from the World Agroforestry Centre (ICRAF).

Trees play a major role in the restoration of landscapes, and can help other crops grow by enhancing the soils they grow on, and protecting against diseases and weather. In addition, their products can generate extra income or complement the diet of the population.

A simultaneously published book (pdf) describes the government's policy and efforts to scale up agroforestry practices to a nation-wide level in the coming ten years.

One notable measure is a legal and institutional framework that grants villagers a degree of freedom needed to successfully implement agroforestry. The country issues 'forest land use licences' to local villagers, which gives them usufruct of the land and incentivizes them to take better care of it. United in sloping land user groups, they are encouraged to join in the planning process for their own fields. This contributes to a sense of ownership and pride in their work.

"My job used to be such a tough one," recalls Mr Kim Myong Chol, a forest ranger from North Hwanghae province who has been involved in the agroforestry project since the beginning. "Farmers would just slash and burn forests to clear the land, with disastrous consequences." But

reorganizing the farmers into groups of sloping land users instilled a sense of responsibility."I am no longer a forest police," Mr Kim smiles proudly, "I am now a forest facilitator."



This image shows restored and restoring hillsides in North Hwanghae province.
Credit: ICRAF

Meine Van Noordwijk, chief science advisor at the World Agroforestry Centre, believes that "the DPR Korea's agroforestry initiatives are a socially unique opportunity for self-organization, with potentially much wider implications in a society where discussions on ways forward are centralized and controlled."

Other measures include the erection of a non-standing agroforestry committee, and agroforestry has been made a compulsory subject at all agricultural universities.

The drafting of the document marks the tenth anniversary of the sloping land management project (pdf), a programme initiated in early 2004 by MoLEP and SDC that aimed to restore the country's degraded sloping lands.

Since the 1990s, when the Soviet Union collapsed and money channels to the DPR Korea dried up, the country has been plagued by a lack of food and [natural disasters](#) as a result of environmental degradation. In a bet to grow more food, farmers converted the hills into farmland, perpetuating the negative spiral.

"The situation required urgent attention," says Kim Kwang Ju, chair of newly established national agroforestry association, and former head of project management and consulting services at MoLEP. "SDC responded to our call for international help and together we set up a project that should restore the integrity of our sloping lands."



This image shows participatory approach to the land use planning process in DPR Korea. Credit: ICRAF

"Several counties of North Hwanghae province near Pyongyang, saw a drastic improvement in their food security and environmental sustainability," remembers Thomas Fisler, Director of Cooperation at SDC in Pyongyang. The project was then replicated in different areas of the country, and in 2007, SDC involved the World Agroforestry Centre for their expertise and technical support with agroforestry systems.

ICRAF conducted several agroforestry workshops in the DPR Korea and invited a scientific delegation to its home base in Yunnan province, an area not dissimilar from the DPR Korea's plagued mountains.

After India, the DPR Korea is the second country in Asia to introduce agroforestry as a means to improve rural livelihoods and restore degraded landscapes.

Dr Jianchu Xu, the regional coordinator for ICRAF East and Central Asia is impressed with the plan, calling it "in many ways more impressive than India. A detailed roadmap, better social mobilization and thorough situational analysis make it a much more solid plan with a higher chance of success."

Provided by World Agroforestry Centre (ICRAF)

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